AMENDMENTS TO THE CLAIMS

1. (currently amended) An siRNA molecule comprising a nucleotide sequence consisting essentially of a sequence set forth in SEQ ID NO: 1 ~~(human BACE1 coding region)~~.
2. (original) The siRNA of claim 1, wherein the nucleotide sequence consists of about 20 to 25 nucleotides.
3. (original) The siRNA of claim 1, wherein the nucleotide sequence comprises SEQ ID NO: 3, 8, 13 or 18.
4. (original) The siRNA of claim 1, wherein the nucleotide sequence consists essentially of SEQ ID NO: 3, 8, 13 or 18.
5. (original) The siRNA of claim 4, wherein the nucleotide sequence consists of SEQ ID NO: 3, 8, 13 or 18.
6. (original) An isolated nucleic acid encoding the sense strand, the antisense strand of both the sense and antisense strands of the siRNA molecule of claim 1.
7. (original) An expression vector comprising the nucleic acid of claim 6.
8. (original) A cell comprising the nucleic acid of claim 6.
9. (original) A composition comprising at least two siRNAs of claim 1.
10. (original) A composition comprising at least two nucleic acids of claim 6.
11. (original) A method for reducing the level of BACE1 protein in a cell, comprising administering into the cell an siRNA molecule of claim 1.
12. (original) A method for reducing the level of BACE1 protein in a cell, comprising administering into the cell a nucleic acid of claim 6.
13. (currently amended) The method of claim 11 ~~or 12~~, comprising contacting the cell with the siRNA molecule.
14. (currently amended) The method of claim 11 ~~or 12~~, wherein the cell comprises amyloid precursor protein (APP) and the method reduces the level of β amyloid (Aβ) peptide in the cell relative to a cell to which an siRNA or nucleic acid was not administered.
15. (original) A method for preparing a pharmaceutical composition comprising combining an siRNA of claim 1 with a pharmaceutically acceptable carrier.

16. (original) A method for treating or preventing Alzheimer's disease in a subject, comprising administering to the subject a therapeutically effective amount of an siRNA of claim 1, to thereby treat or prevent Alzheimer's disease.

17. (original) The method of claim 16, wherein the administration of the siRNA reduces the level of Aβ peptides.

18. (original) The method of claim 16, comprising administering the siRNA into senile plaques.

19. (original) A method for protecting a cell against stress, comprising contacting the cell with or administering into the cell an siRNA molecule of claim 1, to thereby protect the cell from stress.

20. (original) The method of claim 19, wherein stress is oxidative stress.